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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,342	04/11/2006	Jean-Francois Stumbe	288261US0PCT	3536
22850	7590	10/21/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			DOLLINGER, MICHAEL M	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			10/21/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/575,342	<b>Applicant(s)</b> STUMBE ET AL.	
	<b>Examiner</b> MIKE DOLLINGER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/11/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of the species of formula 1a in the reply filed on 07/15/2009 is acknowledged. The traversal is on the ground(s) that the dendritic polymers of Raanby et al do not read on the hyperbranched polymers of the instant claims. This is not found persuasive because Applicants do not point out any specific structural difference between the polymers of Raanby and the polymers of the instant claims. The broadest reasonable interpretation of the limitation to "hyperbranched polyesters" is a polyester with a high degree of branching. A dendritic polyester meets this interpretation of "hyperbranched polyester".

The requirement is still deemed proper and is therefore made FINAL.

### ***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 602.

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***Claim Objections***

3. Claims 2-4 are objected to because of the following informalities: the word “the” or “said” should be inserted before "at least one compound" on line 2.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Saitoh et al (US 5,566,027).

5. Saitoh discloses a photocurable resin composition comprising (A) a polyfunctional urethane modified polyester (meth) acrylate comprising a polyester oligomer and a plurality of (meth)acryloyl groups bonded to the polyester oligomer [column 2 lines 23 -28]. One example of (A) is the reaction product of trimellitic anhydride and propylene glycol subsequently reacted with isophorone diisocyanate and 2-hydroxyethyl acrylate [column 7 lines 19-23]. Polyethylene glycol mono (meth) acrylate or polypropylene glycol mono (meth) acrylate are disclosed as substitutes for 2-hydroxyethyl acrylate [column 3 lines 23-28]. The composition is photocurable and useful as surface resin layer of an optical lens [column 1 lines 46-50] which reads on a binder.

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6. Claims 1, 2 and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Vrancken et al (US 4,082,710).
7. Vrancken discloses compound 16 which is the reaction product of a triacid, polyethylene glycol and acrylic acid [Table 1]. The triacid is the addition product of 2 moles of thioglycolic acid on 1 mole of linoleic acid [column 5 lines 23-24] which is a tricarboxylic acid. The three components are condensed together [column 3 lines 29-38] (which reads on the process of claim 6) but in an alternative method the triacid and polyethylene glycol are first esterified together and then the reaction product is esterified with the acrylic acid [column 4 lines 6-12] (which reads on the process of claim 5). The compound 16 reads directly on the on the hyperbranched polyesters of claims 1 and 2. The compounds with multiple acrylic radicals may advantageously be used as film-forming binders for all applications where rapid polymerization is required [column 7 lines 39-42] and may be cured radical initiators [column 7 line 30] which read on the inventions of claims 7-9.

### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vrancken et al (US 4,082,710).

9. The compound 16 of Vrancken, discussed above, is not prepared by the process claimed in claims 3 and 4, wherein a diacid and a diol are condensed and reacted with an acrylic acid modified with a polyethylene glycol or polypropylene glycol derivative. However, the all the structure of the resulting compound implied by these claimed process steps are present in compound 16 disclosed in Vrancken. Furthermore, claims 3 and 4 are product-by-process claims wherein a product is claimed but defined by the process through which it is made. **Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.** “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. See,

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e.g., *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979). **Once a product appearing to be substantially identical is found and a 35 USC 102/103 rejection is made, the burden shifts to the Applicant to show an unobvious difference.** “The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature” than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP § 2113.

### ***Claim Rejections - 35 USC § 103***

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saitoh et al (US 5,566,027).

11. The process of instant claim 6, reacting a polyol and polyacid in the presence of (c) at least one compound having at least one ethylenically unsaturated double bond, is not explicitly disclosed in Saitoh. However, this process is obvious over the process disclosed in Saitoh, discussed above, that reads on the process in instant claim 5. The only difference between the process of claim 6 and the disclosed process/process of claim 5 is the order of adding

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ingredients, i.e. adding the ethylenically unsaturated compound (c) during condensation of the polyester as opposed to after condensation of the polyester. Case law holds that the selection of any order of mixing ingredients is *prima facie* obvious. *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MIKE DOLLINGER whose telephone number is (571)270-5464. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/mmd/

/Randy Gulakowski/  
Supervisory Patent Examiner, Art Unit 1796